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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/520,485

08/23/2005

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AP 10478

6522

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09/12/2008

EXAMINER

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ART UNIT

PAPER NUMBER

3683

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/520,485	<b>Applicant(s)</b> GRONAU ET AL.	
	<b>Examiner</b> Lan Nguyen	<b>Art Unit</b> 3683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 20-36 is/are pending in the application.
- 4a) Of the above claim(s) 23-31 and 36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20-22 and 32-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 January 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/8/08 has been entered.

### ***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claimed subject matters as claimed in claims 20-22 and 32-35 must be shown or the feature(s) canceled from the claim(s). Claims 20-22 and 32-35 claim methods to control the driving performance of a vehicle based on tire pressures. However, the methods are not illustrated. The figure illustrates a vehicle with various components but no methods such as a flow chart is shown as to how the components are being controlled. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate

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prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 20-22 and 32-35 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

- Claim 21 claims “the reduction is adapted to the degree of tire pressure loss”.

The specification does not describe in details how this function is carried out.

The specification simply states the concept of having transverse dynamics being modified because of tire pressure loss in the first paragraph of page 5 and the last paragraph of page 9. Since the specification does not provide explanation of how to carry out this function, it is non-enable to one of ordinary skill to make or use the invention.

- Claim 35 claim a “SelectLow principle”. Applicant argues that this principle is well known. However, the specification as originally filed does not include an explanation of this principle.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 20-22 and 32-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- In claim 20, “the quality” and “the wheel-individual air pressure” lack antecedent basis.
- In claim 21, should “determining that the vehicle is in a cornering maneuver, wherein the tire exhibiting the reduced tire pressure is associated is located on the outside of the turn” be --determining that the vehicle is in a cornering maneuver, wherein the tire exhibiting the reduced tire pressure is the front wheel located on the outside of the turn--?

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- In claim 21, the last sentence is unclear. Should the reduction be a function of the degree of tire pressure loss? Also, "the reduction" should be --the reduction in transverse dynamics-- in order to clarify the claimed feature.
- In claim 22, "a reduced tire pressure" should be --said reduced tire pressure--.  
Claim 22 is unclear. Is Applicant claiming the front tire with reduced pressure or multiple tires with reduced pressure?
- In claims 32 and 34, "the quality" lacks antecedent basis.
- In claim 35, should "determining that the vehicle is in a cornering maneuver, wherein the tire exhibiting the reduced tire pressure is associated is located on the outside of the turn" be --determining that the vehicle is in a cornering maneuver, wherein the tire exhibiting the reduced tire pressure is the rear wheel located on the outside of the turn--?

Because of these deficiencies, claims 20-22 and 32-35 are treated as best understood.

### ***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 20-22 and 32-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Hrovat et al. (US 5,696,681).

Re: claim 21, Hrovat shows a method of controlling the driving performance of a vehicle with pneumatic tires 18, 20, 22, 24 in which the air pressure in individual tires is monitored for loss of tire pressure by tire pressure sensor 106, the method comprising the steps of determining a loss of tire pressure as shown in box 162, determining or predicting an unstable driving condition as shown in box 170 and reducing transverse dynamics during a cornering maneuver where a reduced tire pressure prevails at the tire of a front wheel, when the tire exhibiting the reduced tire pressure is associated with the outside wheel in a turn as shown in box 174 and column 3, lines 12-19.

Re: claims 20 and 22, Hrovat shows in figure 3 that each tire's pressure and dynamics are taken into consideration in the controlling method and the torque to each wheel is adjusted accordingly.

Re: claims 32-34, Hrovat shows in figure 1 and column 3, lines 1-11 that the lateral acceleration 112, coefficient of friction 114, wheel speeds 104, etc. are monitored and used in the controlling scheme for various programs such as ABS, yaw control, roll and pitch, etc. to ensure the safety of the driver and passengers.

Re: claim 35, Hrovat shows a method of controlling the driving performance of a vehicle with pneumatic tires 18, 20, 22, 24 in which the air pressure in individual tires is monitored for loss of tire pressure by tire pressure sensor 106, the method comprising the steps of determining a loss of tire pressure as shown in box 162, determining or predicting an unstable driving condition as shown in box 170 and reducing transverse dynamics during a cornering maneuver where a reduced tire pressure prevails at the tire of a rear wheel, when the tire exhibiting the reduced tire pressure is associated with

the outside wheel in a turn as shown in box 174 and column 3, lines 12-19. Hrovat shows in figure 1 and column 3, lines 1-11 that the lateral acceleration 112, coefficient of friction 114, wheel speeds 104, etc. are monitored and used in the controlling scheme for various programs such as ABS, yaw control, roll and pitch, etc. to ensure the safety of the driver and passengers.

### ***Response to Arguments***

9. Applicant's arguments filed 8/8/08 have been fully considered but they are not persuasive.

- Applicant argues that Hrovat deals with sudden tire rupture and not a partial tire pressure loss as in the present invention. Applicant's argument is more specific than the claim language. Claims 21 and 35 simply state "the reduction is adapted to the degree of tire pressure loss". A sudden tire rupture is a degree of tire pressure loss even though it is a drastic degree of tire pressure loss. Therefore, Hrovat is still deemed to meet the claimed features.
- Applicant also argues that Hrovat reduce the lateral velocity to zero causing the vehicle to travel in a straight line while the claimed invention aides in a cornering maneuver. Hrovat mentions a left turn in column 1, line 18. In column 3, lines 20-35, Hrovat states that a desired or target trajectory of the vehicle is maintained after the tire rupture. It is clear that Hrovat's method is for aiding the vehicle with a sudden tire pressure loss in a cornering maneuver as well as a straight line driving in order to maintain a desired trajectory.



***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lan Nguyen whose telephone number is (571) 272-7121. The examiner can normally be reached on Monday through Friday, 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on (571) 272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Xuan Lan Nguyen/ 9/10/08  
Primary Examiner  
Art Unit 3683